

I claim:

1. A reverse-blocking power semiconductor component,
comprising:

a semiconductor body forming a drift path of one conduction
type;

a body zone of the other conduction type, opposite to the one
conduction type, provided in said semiconductor body;

a source metallization;

a source zone of the one conduction type placed in said body
zone and connected to said source metallization; and

a region of the one conduction type being inlaid in said body
zone to define a source-side part and a drain-side part in
said body zone, said region inlaid in said body zone being
short-circuited at least to said drain-side part of said body
zone;

said source metallization being connected electrically only to
said source zone.

2. The power semiconductor component according to claim 1, wherein said region inlaid in said body zone is also short-circuited to said source-side part of said body zone.
3. The power semiconductor component according to claim 1, wherein said inlaid region is short-circuited with a purely resistive connection.
4. The power semiconductor component according to claim 1, wherein said inlaid region is short-circuited with a non-rectifying connection.
5. The power semiconductor component according to claim 1, wherein said inlaid region is short-circuited with a metal contact.
6. The power semiconductor component according to claim 1, wherein said inlaid region acts as an electron collector.
7. The power semiconductor component according to claim 1, wherein said semiconductor body forming the drift path has a doping between $2 \cdot 10^{16}$ charge carriers/cm³ and $1 \cdot 10^{14}$ charge carriers/cm³.

8. The power semiconductor component according to claim 1, wherein said semiconductor body forming the drift path has a thickness between 2 μm to 100 μm .

9. The power semiconductor component according to claim 5, wherein said metal contact is disposed in said semiconductor body.

10. The power semiconductor component according to claim 5, wherein said metal contact is disposed on a surface of said semiconductor body.

11. The power semiconductor component according to claim 1, including a compensation structure.

12. The power semiconductor component according to claim 11, wherein said compensation structure includes a compensation region inlaid in said drift path.

13. The power semiconductor component according to claim 12, including a floating compensation pillar.

14. The power semiconductor component according to claim 12, including a compensation pillar connected to said body zone.

15. The power semiconductor component according to claim 11, wherein said compensation structure includes a pillar-like compensation region.

16. The power semiconductor component according to claim 1, wherein said semiconductor body has a trench formed therein; and

a gate is disposed in said trench.

17. The power semiconductor component according to claim 1, including a carrier wafer; and

said a semiconductor body, said body zone, said source metallization, said source zone, and said region are formed on said carrier wafer by SOI technology.

18. The power semiconductor component according to claim 1, including an insulating layer buried in said semiconductor body.